

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for ~~treating hyperpigmentation, or other unwanted pigmentation associated with production of~~ inhibiting the production of melanin in a human comprising topically administering to the skin of a ~~subject in need of treatment a composition comprising one or more siRNA oligomers specific for said human, a composition comprising a~~ double-stranded small interfering RNA (siRNA) oligomer having a sequence complementary to a sequence found in mouse and native human tyrosinase mRNA; said siRNA oligomer comprising two strands, each of said strands having between 15 and 21 nucleotides, including two thymidine nucleotide 3' overhangs, said composition comprising ~~in~~ an amount of said siRNA oligomer effective to ~~ameliorate, reduce[[,]] and/or eliminate the hyperpigmentation, or other unwanted pigmentation associated with production of melanin.~~

2. (currently amended) The method according to claim 1, wherein ~~the composition is a topical composition~~ said skin suffers from hyperpigmentation.

3. (currently amended) The method according to claim 2, wherein said composition is applied to skin for a period of time effective to ameliorate, reduce, and/or eliminate said hyperpigmentation[[,]] ~~or other unwanted pigmentation, or other unwanted skin condition associated with production of melanin.~~

4. (currently amended) The method according to claim 1, wherein the siRNA oligomer ~~has the~~ sequence is:

(a) 5'-UAGGACCUGCCAGUGCUCUtt-3' (SEQ ID NO: 1)[[;]]
3'-ttAUCCUGGACGGUCACGAGA-5' (SEQ ID NO: 2)

or;

(b) 5'-UCCUGGAAACCAUGACAAAtt-3' (SEQ ID NO: 3)[[:]]
3'-ttAGGACCUUUGGUACUGUUU-5' (SEQ ID NO: 4)[[:]]

~~5'-CACACCUGUCUUUGUCUUAtt-3' (SEQ ID NO: 5); or~~
~~3'-ttGUGUGGACAGAAACAGAAC-5' (SEQ ID NO: 6).~~

5. (original) The method according to claim 3, wherein the composition is applied at least once daily for at least one week.

6. (currently amended) The method according to claim 1, wherein the ~~one or more~~ siRNA is present in an amount from about 0.0001 wt % to about 10 wt % of the total weight of the composition.

7. (currently amended) The method according to claim 1, wherein the ~~one or more~~ siRNA is present in an amount from about 0.0005 wt % to about 5 wt % of the total weight of the composition.

8. (currently amended) The method according to claim 1, wherein the ~~one or more~~ siRNA is present in an amount from about 0.001 wt % to about 1 wt % of the total weight of the composition.

9. (original) The method according to claim 1, wherein the composition comprises a cosmetically or dermatologically acceptable vehicle.

10. (original) The method according to claim 1, wherein the composition further comprises a sunscreen.

11. (original) The method according to claim 10, wherein the sunscreen is selected from the group consisting of avobenzone, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide and combinations thereof.

12. (original) The method according to claim 11, wherein the cinnamic acid derivative is octylmethoxycinnamate.

13. (original) The method according to claim 1, wherein the composition further includes an ingredient selected from the group consisting of an alpha hydroxy acid, a beta hydroxy acid, a keto acid, an oxa acid and an oxa diacid.

14. (original) The method according to claim 1, wherein the composition is administered via a transdermal patch.

15. (original) The method according to claim 1, wherein the composition is applied to the face, forehead, neck, arms, hands, legs, knees, feet, chest, back, groin, or buttocks.

16. (currently amended) A method of inhibiting the production of melanin in human skin ~~improving the aesthetic appearance of skin~~, comprising topically applying to the skin a composition comprising one or more siRNA oligomers selected from the group consisting of:

- (a) 5'-UAGGACCUGCCAGUGCUCUtt-3' (SEQ ID NO: 1)
3'-ttAUCCUGGACGGUCACGAGA-5' (SEQ ID NO: 2);
- (b) 5'-UCCUGGAAACCAUGACAAAtt-3' (SEQ ID NO: 3)
3'-ttAGGACCUUUGGUACUGUUU-5' (SEQ ID NO: 4); and
- (c) 5'-CACACCUGUCUUUGUCUUAAtt-3' (SEQ ID NO: 5)
3'-ttGUGUGGACAGAAACAGAAC-5' (SEQ ID NO: 6);

~~specific for mouse and human tyrosinase in an amount effective to reduce[[]] inhibit[[]] or ameliorate one or more unwanted skin conditions associated with production of melanin.~~

17. (currently amended) The method according to claim 16, wherein the ~~improvement is selected from the group consisting of lightening skin tone, reducing the aged appearance of~~ composition ~~is applied to the skin [[]] decreasing suffering from a hyperpigmented states such as condition~~

selected from the group consisting of age spots, freckles, ~~and the like,~~ improved skin discoloration, and combinations thereof.

18. (original) The method according to claim 16, wherein the skin is sensitive skin.

19. (original) The method according to claim 16, wherein the composition is applied topically at least once daily for at least one week.

20. (original) The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.0001 wt % to about 10 wt % of the total weight of the composition.

21. (original) The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.0005 wt % to about 5 wt % of the total weight of the composition.

22. (original) The method according to claim 16, wherein the one or more siRNA oligomers is present in an amount of from about 0.001 wt % to about 1 wt % of the total weight of the composition.

23. (original) The method according to claim 16, wherein the composition comprises a cosmetically or dermatologically acceptable vehicle.

24. (original) The method according to claim 16, wherein the composition is administered in a liposome delivery vehicle or a transdermal patch.

25. (currently amended) The method according to claim ~~[[16]]~~ 24, wherein the composition is administered in ~~[[the]] a liposome delivery vehicle is administered topically.~~

26. (original) The method according to claim 16, wherein the composition is administered in a biodegradable microsphere.

27. (original) The method according to claim 16, wherein the composition further comprises a sunscreen.

28. (original) The method according to claim 27, wherein the sunscreen is selected from the group consisting of avobenzene, cinnamic acid derivatives, octyl salicylate, oxybenzone, titanium oxide, zinc oxide and combinations thereof.

29. (original) The method according to claim 28, wherein the cinnamic acid derivative is octylmethoxycinnamate.

30. (original) The method according to claim 16, wherein the composition further includes an ingredient selected from the group consisting of an alpha hydroxy acid, a beta hydroxy acid, a keto acid, an oxa acid and an oxa diacid.

31 - 39 (cancelled)